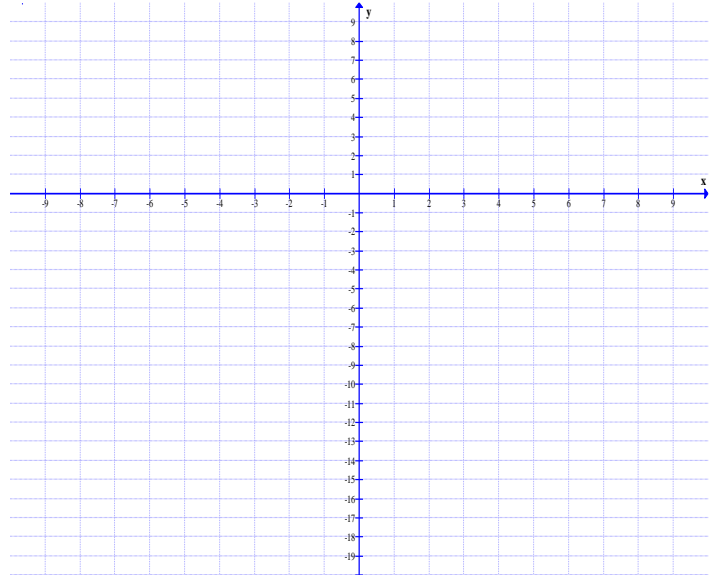


Quadratic Graphs and Tables

Name \_\_\_\_\_

1. Create a table and a graph for the equation  $y = (x - 2)(x + 6)$

X									
Y									



- a. What pattern do you see in the table?
- b. Does that pattern help you find any of the important points that we usually look for?

2. The following table is for a quadratic function  $g(x)$ . Use that knowledge to fill in the rest of the table.

x	-5	-4		-2	-1	0	1	2	3	4	5		7	8	9
$g(x)$	20		0		-12	-15	-16		-12	-7	0	9		33	

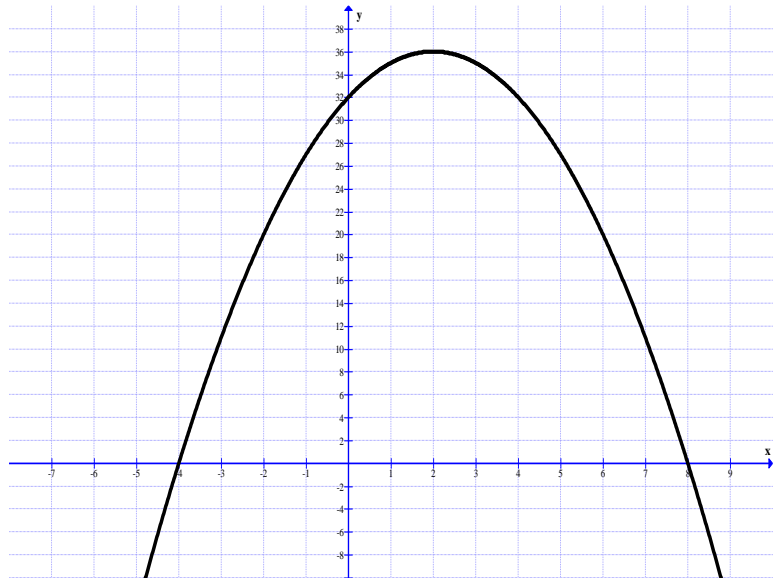
- a. Create an equation that fits this table.
- b. What points from the table did you need to create your equation? Why?
3. Create a table for the function  $k(x) = (x - 7)(x + 1)$ . Then (a) circle the vertex in the table, (b) box the y-intercept in the table, and (c) shade the x-intercepts in the table.

x									
$k(x)$									

- a. What is the line of symmetry for the function  $k(x)$ ?

4. Give the following information for the graph to the right.

- a. Line of symmetry \_\_\_\_\_
- b. Vertex \_\_\_\_\_
- c. Y-intercept \_\_\_\_\_
- d. X- intercepts \_\_\_\_\_
- e. Create an equation that fits this graph.
- f. Give an example of a real life situation that might have a graph like this.



x	f(x)
-2	40
0	16
2	0
4	-8
6	-8
8	0
10	16
12	40

5. Give the following information for the table to the left.

- a. Line of symmetry \_\_\_\_\_
- b. Vertex \_\_\_\_\_
- c. Yintercept \_\_\_\_\_
- d. X- intercepts \_\_\_\_\_
- e. Create an equation that fits this graph.
- f. Give an example of a real life situation that might have a table like this.

6. Give the following information for the graph to the right.

- a. Line of symmetry \_\_\_\_\_
- b. Vertex \_\_\_\_\_
- c. Y-intercept \_\_\_\_\_
- d. X- intercepts \_\_\_\_\_
- e. Create an equation that fits this graph.
- f. Give an example of a real life situation that might have a graph like this.

